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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/434,314	11/04/1999	PETER J. BLACK	PA000045	3810

23696 7590 02/03/2004

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

LEE, JOHN J

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 02/03/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/434,314

Applicant(s)

BLACK, PETER J.

Examiner

JOHN J LEE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments with respect to claims 40 - 75 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 40 – 96** are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo (US Patent number 6,526,028).

Regarding **claims 40, 49, 59, and 69**, Kondo discloses that a method for performing handoff in a communication system (Fig. 7 and abstract). Kondo teaches that receiving, by a subscriber station (10 in Fig. 7), pilot signals and reverse link power control commands from one or more base stations (20s in Fig. 7) (Fig. 15 and column 30, lines 38 – 50 where teaches base stations transmit a reverse transmission power control information signal and pilot information signal). Kondo teaches that selecting a first base station (20 in Fig. 7), for transmission of forward link data to the subscriber station (10 in Fig. 7) based, at least in part, on energy of the pilot signals received from the one or more base stations (Fig. 7 and column 28, lines 7 – 52 where teaches mobile station determines, as a particular base station, one of the first through the third base stations based on quality level, power reception level). Kondo also teaches that selectively performing a

handoff to the first base station based, at least in part, on whether signals transmitted by the subscriber station are received by the first base station with sufficient energy according to the reverse link power control commands received from the first base station (column 30, lines 38 – column 31, lines 48 and Fig. 9, 16 where teaches the base stations transmit power control information and pilot information to mobile station and mobile station determines a base station based on forward link power and transmits the information, reverse link power commands, to the base station. When base station determines whether or not any propagation error based on power detected on the reverse link on the basis of the detected result, the base station transmits the forward transmission signal to the mobile station to perform handoff or not).

Furthermore, the claimed limitation “one or more base stations” can be interpreted only one base station, which is currently communicating with the mobile station, transmits power control commands and pilot signal to the mobile station as known art and the mobile station does not need handoff because of communicating one base station.

Regarding **claims 41, 50, 60, and 70**, Kondo discloses that storing information corresponding to the reverse link power control commands received from the one or more base stations (Fig. 8 and column 28, lines 7 – 52).

Regarding **claims 42, 51, 52, 61, 62, and 71**, Kondo discloses all the limitation, as discussed in claim 40. Furthermore, Kondo further discloses that determining whether it is necessary to perform the handoff to the first base station (column 5, lines 27 – 50 and Fig. 7). Kondo teaches that if it is necessary to perform the handoff, determining whether the signals transmitted by the subscriber station are received by the first base station with

sufficient energy based, at least in part, on history of the reverse link power control commands received from the first base station (column 30, lines 38 – column 31, lines 48, column 6, lines 19 – 49, and Fig. 9, 16). Kondo teaches that if the signals transmitted by the subscriber station are received by the first base station with sufficient energy, permitting the handoff to the first base station (column 30, lines 38 – column 31, lines 48, column 6, lines 19 – 49, and Fig. 9, 16).

Regarding **claims 43, 53, 63, and 72**, Kondo discloses that if the signals transmit by the subscriber station are not received by the first base station with sufficient energy, inhibiting the handoff to the first base station (column 37, lines 1 – 38 and Fig. 16, 30).

Regarding **claims 44, 54, and 64**, Kondo discloses that selecting an alternative base station for transmission of forward link data to the subscriber station (column 38, lines 45 – column 39, lines 8 and Fig. 10, 16).

Regarding **claims 45, 55, 65, and 73**, Kondo discloses that if it is not necessary to perform the handoff, determining whether a base station currently being used for transmission of forward link data to the subscriber station receives signals from the subscriber station with sufficient energy (column 30, lines 38 – column 31, lines 48, Fig. 9, 16, and column 6, lines 19 – 49). Kondo teaches that if the base station currently being used does not receive signals from the subscriber station with sufficient energy, performing a handoff to an alternative base station (column 30, lines 38 – column 31, lines 48, Fig. 9, 16, and column 6, lines 19 – 49).

Regarding **claims 46, 56, and 66**, Kondo discloses that selecting the alternative base station based on reverse link power control commands received from the alternative

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base station indicating that signals transmitted by the subscriber station are received by the alternative base station with sufficient energy (column 30, lines 38 – column 31, lines 48, Fig. 9, 16, and column 6, lines 19 – 49).

Regarding **claims 47, 57, 67, and 74**, Kondo discloses that transmitting, by the subscriber station, a message indicating identity of the first base station (column 23, lines 24 – 33 and Fig. 7, 15).

Regarding **claims 48, 58, 68, and 75**, Kondo discloses that the message further indicates a requested rate to transmit to the subscriber station (column 26, lines 46 – 53 and Fig. 7, 15).

Regarding **claim 76**, Kondo discloses all the limitation, as discussed in claims 40 and 42.

Regarding **claim 77**, Kondo discloses all the limitation, as discussed in claims 40 and 42.

Regarding **claim 78**, Kondo discloses all the limitation, as discussed in claims 40 and 47.

Regarding **claim 79**, Kondo discloses all the limitation, as discussed in claims 40 and 45.

Regarding **claims 80 and 83**, Kondo discloses all the limitation, as discussed in claims 40 and 41. Furthermore, Kondo further discloses that a processor (107 in Fig. 8), coupled with the memory (115 in Fig. 8), configured to permit a handoff to a selected base station of the one or more base stations according to the reverse link power control commands (Fig. 8 and column 28 – 7 – 52).

Regarding **claims 81 and 85**, Kondo discloses the reverse link power control commands requesting the subscriber station to decrease its transmission energy are indicative that the reverse link signal being received (column 26, lines 46 – 67 and Fig. 15).

Regarding **claims 82 and 86**, Kondo discloses the reverse link power control commands requesting the subscriber station to increase its transmission energy are indicative that the reverse link signal is not being received (column 26, lines 46 – 67 and Fig. 15).

Regarding **claim 84**, Kondo discloses all the limitation, as discussed in claims 40 and 42. Furthermore, Kondo further discloses that a plurality of base stations, each base station configured to receive the signal and transmit reverse link power control commands (Fig. 15 and column 30, lines 38 – column 31, lines 48).

Regarding **claim 87**, Kondo discloses all the limitation, as discussed in claims 40 and 42.

Regarding **claim 88**, Kondo discloses all the limitation, as discussed in claims 48 and 80.

Regarding **claim 89**, Kondo discloses all the limitation, as discussed in claims 48 and 80.

Regarding **claims 90 and 94**, Kondo discloses all the limitation, as discussed in claims 40, 42, and 43.

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Regarding **claims 91 and 95**, Kondo discloses that receiving from the first base station a message indicating a quality of the received reverse link signal (Fig. 8 and column 28, lines 35 – 52).

Regarding **claim 92**, Kondo discloses that the received reverse link signal is a data request control signal (column 32, lines 34 – 45 and Fig. 20).

Regarding **claim 93**, Kondo discloses that determining the first base station was not selected for transmission of a last frame of data (Fig. 8 and column 28, lines 30 – 52).

Regarding **claim 96**, Kondo discloses all the limitation, as discussed in claims 40 and 76.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamabe (US Patent number 6,026,081) discloses Method of Controlling Power on Forward Link in a Cellular.

Sundelin et al. (US Patent number 6,144,861) discloses Downlink Power Control in a Cellular Mobile Radio Communication System.

Johansson et al. (US Patent number 6,341,124) discloses Accommodating Packet Data Loss at Base Stations Interfacing Between a Packet Switched Network and CDMA Macrodiversity Network.

Any response to this action should be mailed to:

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or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to **John J. Lee** whose telephone number is **(703) 306-5936**.
He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00
pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay
Aung Maung**, can be reached on **(703) 308-7745**. Any inquiry of a general nature or
relating to the status of this application should be directed to the Group receptionist
whose telephone number is (703) 305-4700.

J.L
January 23, 2004

John J Lee

